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#### FRAMEWORK FOR ROOT CAUSE ANALYSIS AND CORRECTIVE ACTIONS\*

The following template has borrowed very heavily from the Joint Commission on Accreditation of Healthcare Organizations, now known as the Joint Commission. It has been scaled down and reworded to more closely reflect the work done in a variety of residential settings for children in Indiana Department for Child Services care. Please feel free to use or not use it, or adapt it further so that it better fits your organizations unique needs and systems.

| EVEN | T DESCRIPTION          |                           |              |
|------|------------------------|---------------------------|--------------|
| When | n did the event occur? |                           |              |
| Date | e: 11/14/2020          | Day of the week: Saturday | Time: 6:30pm |

#### Detailed Event Description Including Timeline: (Who, What, Where, When and How-include what was happening just before the

At 6:30 PM youth DB was given her hygiene products by staff HD and asked to take her evening shower. While DB was in the shower staff HD heard shouting in the hallway and stepped away from the bathroom door to see two youth fighting staff AB and CD. Staff HD attempted to use TCI techniques to assist with separating the fighting youth from each other and staff, but when she was unsuccessful, HD ran to the office to grab the walkie talkie and call behavior support team for assistance. Behavior Support responded in less than five minutes and contained the situation and escorted both youth to a quieter area to process. HD then returned to the door of the shower where she could still hear the water running. HD knocked on the door and called for DB to respond. DB did not respond. HD then reminded DB that if she did not respond immediately that she would have to enter the bathroom due to DB being on precautions for suicidal ideation. DB still did not respond, so HD entered the bathroom and saw that DB had ripped the towel into strips which she had then fashioned into a noose and tied to the shower head. DB was unresponsive with facial discoloration. Staff HD yelled for staff to bring scissors and the walkie talkie. Staff AB responded and assisted HD in cutting off the towel from around DB's neck. DB began breathing and crying as soon as the towel was cut from around her throat, which was red with abrasions from the tightness of the towel. AB then used the walkie to ask staff in office area to call 911. Ambulance arrived and transported DB to Memorial Hospital where she was assessed medically and by crisis responders. DB was admitted to Memorial's adolescent acute unit for suicide attempt.

incident and how event ended/action taken)

#### Diagnosis:

Major Depressive Disorder Post-Traumatic Stress Disorder Borderline Personality Disorder traits

### Medications: (any new or recently discontinued medications?)

Seroquel XR 400mg BID Vistaril 50 mg HS

Zoloft 50 mg QAM Zoloft was a new medication added 3 weeks ago at last psychiatric appointment to address depression symptoms

#### Past Medical/Psychiatric History:

DB has a significant history of complex trauma, including witnessing domestic violence between her mother and father, as well as suspected sexual abuse by her paternal grandfather which was reported but not substantiated. DB has a history of suicidal gestures and ideation, including one incident one week ago in which she placed her belt around her neck when peers were fighting and she and her peers were asked to go to their rooms while staff intervened. She did not tighten the belt, and was just lying on her bed fidgeting with the belt and buckle when staff entered her room. She denied any suicidal intent, stating she was just "fooling around because these B's stress me out." She was placed on special precautions for suicidal ideation at that time with every ten minute checks, and belts, shoe strings and other potentially harmful items were removed from her room. She has been hospitalized twice previously for suicidal ideation and depression.

## **ROOT CAUSE ANALYSIS - QUESTIONS**

| # | Analysis<br>Questions               | Prompts  | Analysis Findings  | Root Cause<br>Types<br>(Table A-1)                                  | Causal Factors/Root Cause Details (Table A-1)   |
|---|-------------------------------------|--|--|---|---|
| 1 | What was the intended process flow? | List the relevant process steps as defined by the policy, procedure, protocol, or guidelines in effect at the time of the event. You may need to include multiple processes.  Examples of defined process steps may include, but are not limited to:  Residential program's protocol Behavior management procedures Interventions Assessment (pain, suicide risk, medical, and psychological) procedures Safety guidelines/Special Precautions Note: The process steps as they occurred in the event will be entered in the next question. | unit with youth are required to keep walkie talkies on their person in order to call for assistance in an emergency, but staff from the previous shift had neglected to charge the device, so it had been placed on the charger in the office during dinner time. Supervisor called off for this shift due to illness but was not replaced due to staff still being in ratio. Walkie Talkie normally given to Supervisor was | Staff performance factors  Equipment Factor  Organizational Factors | Staff failed to ensure that walkie talkie was charged.  Needed equipment was not available (walkie talkie)  Organization failed to anticipate need for an additional walkie to ensure one was always charged and available. |
|   |                                     | quesuon  | not picked up from administration building. Youth who are on special precautions with 10 minute checks should have staff check on their well-being every 10 minutes are to ensure there are no potentially harmful items in the bathroom before allowing youth to enter,   | Communication<br>Factor   | Supervisor failed to communicate need for admin walkie to be taken to unit.   |

|   |   |   | and then check on youth every ten minutes to ensure they are ok. Youth on suicide precautions are reassessed by their therapist every 24-48 hours. DB was last assessed on 11/13/2020  |   |  |
|---|---|---|--|---|--|
| 2 | Were there any steps in the process that did not occur as intended? | Explain in detail any deviation from the intended processes listed in Analysis Question #1 above.   | Staff with youth on unit did not have a walkie talkie on their person when the fight broke out so that they could call for help. Staff HD did not notice that the towel DB had chosen was ripped and could be easily torn into strips. | Walkie talkie issues<br>noted above<br>Mgt/Supervisory<br>issues<br>Staff/Process | There were no policies or procedures in place that related to checking for and discarding ripped towels. Staff were not specifically trained to do this to reduce suicide risk by hanging.  There was no redundant process for ensuring walkie talkie was charged and available in supervisor absence. |
| 3 | What human factors were relevant to the outcome?                    | Discuss staff-related human performance factors that contributed to the event. Examples may include, but are not limited to:  Failure to follow established policies/procedures | Staff HD was distracted by the fight that broke out on the unit right after She took DB to the bathroom. This caused her to be less thorough in her  | Task/Process factors  | There was not a clear process developed for managing supervision of a youth on special   |

|   |   | <ul> <li>Fatigue</li> <li>Inability to focus on task/distraction</li> <li>Inattentional blindness/confirmation bias</li> <li>Personal problems</li> <li>Lack of complex critical thinking skills</li> <li>Rushing to complete task</li> <li>Boundary issues</li> <li>Emotional reaction to youth behavior</li> <li>Lack of buy-in to residential program values and mission</li> </ul>                    | assessment of bathroom safety due to rushing to help with the fight in the hallway.            |                   | precautions in the shower when staff was also needed to break up a fight if there was no walkie talkie available. |
|---|---|---|--|-------------------|---|
| 5 | What controllable environmental factors affected the outcome?       | What environmental factors within the residential program's control affected the outcome? Examples may include, but are not limited to:  • Safety or security risks in the EOC  • Lighting or space issues  • Potentially harmful items not removed from youth environment  The response to this question may be addressed more globally in Question #17. This response should be specific to this event. | Staff could have removed the ripped towel from the store of towels available for youth to use. | Staff performance | Staff did not remove potentially harmful items from the youth's environment.                                      |
| 6 | What uncontrollable external factors influenced the outcome?        | Identify any factors the residential program cannot change that contributed to a breakdown in the internal process, for example natural disasters, power outage, pandemic protocols   | N/A  |                   |   |
| 7 | Were there any other factors that directly influenced this outcome? | List any other factors not yet discussed.   | DB could have been triggered to self harm by the sound of people fighting.                     | Communication     | Clinical staff could have communicated to direct care staff that  |

|    |  |   |   |                          | this was a high risk situation for this youth.  |
|----|--|---|---|--------------------------|---|
| 8  | What are the other areas in the agency where this could happen?                  | List all other areas in which the potential exists for similar circumstances. For example:  Other units/programs  Different physical areas of the building(s)  Identification of other areas within the residential program that have the potential to impact youth safety in a similar manner. This information will help drive the scope of your action plan.   | Any area where walkie talkies are used and where youth use towels to take showers.  | N/A                      |   |
| 9  | Was staff properly qualified and currently competent for their responsibilities? | Include information on the following for all staff and providers involved in the event. Comment on the processes in place to ensure staff is competent and qualified. Examples may include but are not limited to:  Orientation/training  Competency assessment (What competencies do the staff have and how do you evaluate them?)  Provider and/or staff scope of practice concerns (trained/qualified to do assessments)  Provider and/or staff performance issues | All staff have 40 hours of new hire training which includes behavior management, special precautions policy and protocols, and traumainformed training.  Therapists that perform risk assessments are masters level licensed clinicians and trained in the use of the risk assessments used by the program. | N/A                      |   |
| 10 | How did actual staffing compare with ideal level?                                | Include ideal staffing ratios and actual staffing ratios along with unit census at the time of the event.  Note any unusual circumstance that occurred at this time.  What process is used to provide   | Staffing ratio was 3:7 which exceeds the required ratio. When extra staff are required in a crisis  | Mgt/Supervisory<br>Issue | Mgt/Supervisory<br>staff only<br>considered ratio<br>and not needed<br>roles present in the |

|    |  | extra assistance for youth in a crisis situation?  • Adequate supervisory oversight of staff to ensure protocols were followed?   | situation, staff are to utilize the walkie talkie to call for behavior management staff to come to the unit and assist in less than 5 minutes.  No supervisor was present on this shift due to callin/illness.                     |   | millieu   |
|----|--|---|--|---|---|
| 11 | What is the plan<br>for dealing with<br>staffing<br>contingencies? | Include information on what the residential program does during a staffing crisis, such as call-ins, bad weather, quarantine, or increased patient acuity. Describe the health care organization's use of alternative staffing. Examples may include, but are not limited to:  PRN staff  Mandatory overtime  Supervisors working the unit  Administrative staff working the unit  Nursing staff working the unit | When staff are out of ratio, administrative staff will either require call in PRN staff, ask supervisor to cover the shift and/or require mandatory overtime. Administrative staff and nursing staff do not usually work weekends. | Organizational<br>Factor  | Agency failed to anticipate that meeting staff ratio without the supervisor for that shift could leave staff short a walkie talkie if supervisor called out and no provision was made for extra walkie on the unit. |
| 12 | Were such contingencies a factor in this event?                    | If alternative staff were used, describe their orientation to the area, verification of competency, and environmental familiarity.  | Staff were not out of ratio.  It is possible that lack of supervisor on the unit may have contributed to walkie talkie not being charged.  | Organizational factor   | Direct care staff replacing supervisor on the unit for this shift did not have access to an additional needed walkie talke  |
| 13 | Did staff performance during the event meet expectations?          | Describe whether staff performed as expected within or outside of the processes.  To what extent was leadership aware of any performance  | Previous shift staff should<br>have ensured that one of<br>the two unit walkie talkies<br>was charged.<br>Staff should have noted  | Mixed. Staff handled the situation as best they could given the lack of established |   |

|    |   | <ul> <li>deviations at the time?</li> <li>What proactive surveillance processes are in place for leadership to identify deviations from expected processes?</li> <li>Are there in person pop-ins from administrative staff to assess compliance with agency protocols? Random video surveillance?</li> <li>Include omissions in critical thinking and/or performance variance(s) from defined policy, procedure, protocol, and guidelines in effect at the time.</li> </ul>   | the ripped towel and removed it when stocking shelves with towels.  Staff performed as needed in responding to the emergency and calling 911 and notifying supervisor, who notified DCS.  Administrative staff do occasionally pop into the unit, but this is mostly during normal business hours.  | protocols and needed equipment and supervisory direction. |  |
|----|---|---|---|---|--|
| 14 | To what degree was all the necessary information available when needed? Accurate? Complete? Unambiguous? Were current policies and procedures sufficient to provide guidance during this event? | <ul> <li>Discuss whether youth assessments were completed, shared, and accessed by members of the treatment team, to include therapists, according to the organizational processes.</li> <li>Identify the communication processes used to disseminate information.</li> <li>Discuss to what extent the available youth information (special precautions status and protocols, level of observation required, room safety sweep) was clear and sufficient to provide an adequate summary of the youth's condition, treatment, and response to treatment.</li> <li>Describe staff utilization and adequacy of policy, procedure, protocol, and guidelines specific to the youth care provided.</li> </ul> | Youth assessments were completed as needed. Staff communication in the shift log effectively communicated the child's special precautions status. Established procedure is to have the unit walkie talkie charging for the last 60 minutes of shift with the supervisor's walkie talkie available for use during this time. Unit Supervisor was not present, therefore staff made judgment call to keep using walkie talkie rather than placing it on the charger. Specific protocols for | Team Factors  | Specific protocol for removing ripped towels from rotation to reduce suicide risk were not in place. |

|    |  | Review current policies and established procedures to determine if they provided guidance specific enough to help prevent this type of incident.   | removing ripped towels was not developed.   |               |   |
|----|--|--|---|---------------|---|
| 15 | To what degree is communication among participants adequate?                       | Analysis of factors related to communication should include evaluation of verbal, written, electronic communication or the lack thereof.  Consider the following in your response, as appropriate:  The timing of communication of key information  Misunderstandings related to language/cultural barriers, abbreviations, terminology, incomplete documentation, etc.  Proper completion of internal and external hand-off communication between shifts  Involvement of youth, family, and/or significant others  Supervisory involvement in communication with direct care staff  Administrative staff communication with direct care staff | Therapist did not communicate to direct care staff that child's trauma history and recent assessment revealed that others fighting could trigger her impulse to self harm.  Supervisory/administrative and clinical staff could have shared this information with direct care staff, since it directly impacts youth safety and well-being. The issue had been discussed in treatment team, but weekend direct care staff (other than supervisors) do not typically attend treatment team | Communication | Clinical staff did not communicate elevated risk to resident from conflict. Supervisors did not communicate this as a safety issue either. 1st shift staff did not inform staff in admin building that they did not have a charged walkie talkie to hand off to next shift. |
| 16 | Was this the appropriate physical environment for the processes being carried out? | Consider processes that proactively manage the youth care environment.  This response may correlate to the response in Question #6 on a more global scale.  • What evaluation tool or method is in place to evaluate process needs and mitigate physical environment and youth care  | Yes   | N/A           |   |

|    |  | <ul> <li>environmental risks?</li> <li>How are these process needs addressed organization-wide? Examples may include, but are not limited to:</li> <li>Assessment of EOC risks</li> <li>Evaluation of egress points</li> <li>Did youth's assessed precautions level indicate this was an appropriate environment for the youth?</li> <li>Rechecking youth room after initial safety sweep for potentially harmful items</li> <li>Are bathrooms and other areas besides the youth's room swept for potentially harmful items before youth accesses those environments?</li> <li>How does agency handle youth reentry to milieu from school or other areas off the living unit to ensure no items that compromise safety are brought into the environment?</li> </ul> |  |     |  |
|----|--|---|--|-----|--|
| 17 | What systems are in place to identify environmental risks?         | Identify environmental risk assessments.  * Does the current environment meet codes, specifications, regulations?  * Does staff know how to report environmental risks?  * Was there an environmental risk involved in the event that was not previously identified?  | Maintenance and supervisory staff assess for EOC risks daily. Current environment meets all codes and regulations. | N/A |  |
| 18 | What<br>emergency<br>responses have<br>been planned<br>and tested? | Describe variances in expected process due to an actual emergency or failure mode response in connection to the event.  • Related to this event, what safety  | N/A  | N/A |  |

|    |  | evaluations and drills have been conducted and at what frequency (e.g. practice de-escalating techniques, behavioral emergency drills, patient abduction or patient elopement)? Emergency responses may include, but are not limited to:  • Fire drills  • Medical emergency drills  • Suicide attempt response  • Special precautions implementation  Failure mode responses may include, but are not limited to:  • Computer down time  • Power loss  • Insufficient staff to handle multiple concurrent behavior issues |   |     |  |
|----|--|--|---|-----|--|
| 19 | How does the residential program's culture support risk reduction? | How does the overall culture encourage change, suggestions, and warnings from staff regarding risky situations or problematic areas?  • How does leadership demonstrate the residential program's culture and safety values?  • How does the residential program assess culture and safety?  • How does leadership address disruptive behavior?  • How does leadership establish methods to identify areas of risk or access employee suggestions for change?  • How are changes implemented?                              | Residential program has a PI committee that regularly evaluates data related to risk trends and develops plans to reduce risk. PI committee regularly gathers responses from youth and family members regarding perceptions of safety and culture. There is a suggestion box for staff in the administrative building and for youth on their units.  Leadership attends weekly resident council groups and gives feedback on unit | N/A |  |

|    |  |   | behavioral goals and progress toward rewards.  |              |  |
|----|--|---|--|--------------|--|
| 20 | How does leadership address the continuum of patient safety events, including close calls, adverse events, and unsafe, hazardous conditions? | <ul> <li>Does leadership independently initiate Root Cause Analyses when close calls occur?</li> <li>Has leadership provided for required resources or training?</li> <li>Does leadership communicate corrective actions to all staff stemming from any analysis following reported risks?</li> <li>How quickly and effectively does leadership address identified risks in the environment?</li> </ul> | Residential program is two years old and has not previously completed a Root Cause Analysis unless requested by the licensure consultant. Corrective action taken in previous Root Cause Analyses was communicated in the form of training all front-line staff in new policies or protocols. Leadership ensures that all identified safety risks in the environment are corrected within 24 hours when possible, and/or that children are removed from the area where the risk is presented until such time as it is corrected. | N/A          |  |
| 22 | How can orientation and in-service training be improved?   | Describe how orientation and ongoing education needs of the staff are evaluated and discuss its relevance to event.  • How are competencies assessed after training? • Are critical thinking skills taught?   | All new staff go through<br>two weeks new hire<br>training on culture,<br>trauma-informed care, the<br>program's treatment<br>model, verbal de-<br>escalation, safe physical<br>management skills,   | Team Factors | Team has not proactively initiated RCA and has not utilized near misses as a potential staff training opportunity. In particular, this |

|    |  | <ul> <li>Does agency utilize scenarios from previous near misses to train staff in best response options?</li> <li>Are all staff trained in evidence based practices?</li> </ul>   | program policy and procedures. All trainings have a post test to evaluate competency as well as observation by supervisor with a check off list of demonstrated competency during the first two weeks on the job.  Program utilizes scenarios in behavior management trainings to help develop critical thinking skills.  Program has not utilized scenarios from previous near misses for training purposes. |                   | would make a good scenario in trauma-informed care training.  |
|----|--|--|---|-------------------|---|
| 23 | Was available technology used as intended? (examples include Electronic medical records, internal communication systems, etc.) | Describe variances in the expected process due to education, training, competency, impact of human factors, functionality of equipment, and so on:  • Were phones and/or walkie talkies available and working?  • Were all staff emails or communication logs shared as intended to update staff on relevant issues per shift?  • Was technology designed to minimize user errors or easy-to-catch mistakes? (will the EMR (Electronic Medical Record) flag an entry that is incomplete, lacking essential information such as | Walkie talkie was not immediately available to staff supervising shower or working the unit due to it being on the charger. Communication logs contained current information of special precautions. Agency does not utilize an EMR.  | Equipment factors | Second walkie talkie was not charged and available, third walkie was locked in admin office. Staff had to step away from child under observation to radio for help with fight on the unit |

|    |  | <ul> <li>interval for observation of special precautions, or signature of relevant persons notified?)</li> <li>Did technology provide flags to signal staff attention to special precautions/elevated risk?</li> <li>Did the technology work well with the workflow and environment?</li> <li>Was the technology used outside of its specifications?</li> </ul> |   |               |   |
|----|--|---|---|---------------|---|
| 24 | How might<br>technology be<br>introduced or<br>redesigned to<br>reduce risks in<br>the future? | Describe any future plans for implementation or redesign. Describe the ideal technology system that can help mitigate potential adverse events in the future.   | The residential program could begin placing a copy of treatment team notes in the communication logs after each weekly meeting with a section that addresses milieu issues. | Communication | Direct Care staff were unaware of the elevated risk for resident due to fighting in the milieu. |

### **CORRECTIVE ACTIONS**

| Root Cause<br>Types<br>(Table A-1)                                | Causal Factors/Roo t Cause Details (Table A-1)   | Corrective Actions Taken   | Follow up to ensure risk is reduced/eliminated  |
|---|--|--|---|
| Management<br>supervisory<br>issues                               | No policy or<br>process for<br>removing ripped<br>towels                                     | Action Item #1: Policy #123 written to address the policy and procedure for ensuring ripped towels are removed from circulation. (see attached policy) All staff trained on this policy by 1/15/2021                                 | Checking for ripped towels has been added to weekly EOC checklist. Weekly checklists are reviewed monthly   |
| Equipment,<br>Staff<br>Performance &<br>Organizational<br>factors | Charged walkie talkie not available for staff to call for help without leaving youth         | Action Item #2: ED ordered the purchase of an additional walkie talkie and charger base for each unit, so that an additional device was always available and charged regardless of whether shift supervisor was present on the unit. | Ensuring charged device is always available has been added to weekly EOC checklist.   |
| Communication factors   | Staff were<br>unaware that<br>fighting could<br>trigger youth                                | Action Item #3: Clinical staff will review ICMP monthly in treatment team and update as needed. Direct care staff will review and sign off on all ICMP updates.  | Clinical supervisor will ensure all ICMP's are reviewed monthly, Unit supervisors will ensure that all direct care staff review and sign off on ICMP                |
| Team factors  | Team has not<br>previously<br>initiated a RCA<br>or used<br>scenarios for<br>training        | Action Item #4: \ Leadership team will share information on the RCA process with staff and incorporate scenarios in training   | PI/QA committee will review incidents<br>for need to do RCA and for useful<br>scenarios to incorporate in training  |
| Organizational factors  | Program had no<br>process for<br>ensuring ratio<br>included<br>adequate<br>supervisory staff | Action Item #5: Program revised Call-in policy # 234 to assess number of supervisory staff present per shift in addition to staff to youth ratio,  | HR dept will review schedules monthly to ensure that each unit has supervisory staff present at all times unless Admin staff have approved the supervisor shortage. |
|   |  | Action Item #6:  |   |

|  | Action Item #7: |  |
|--|-----------------|--|
|  |                 |  |
|  |                 |  |
|  | Action Item #8: |  |
|  |                 |  |
|  |                 |  |

## TABLE A-1. ROOT CAUSES

| Root Cause Types Communication factors                            | <ul> <li>Causal Factors / Root Cause Details</li> <li>Communication breakdowns between and among teams, staff, and providers</li> <li>Communication during handoff, transition of care</li> <li>Language or literacy</li> <li>Availability of information</li> <li>Misinterpretation of information</li> <li>Presentation of information</li> </ul>   |
|---|---|
| Environmental factors   | <ul> <li>Noise, lighting, flooring condition, etc.</li> <li>Space availability, design, locations, storage</li> <li>Maintenance, housekeeping</li> </ul>  |
| Equipment/device/<br>supply/<br>healthcare IT factors             | <ul> <li>Equipment, device, or product supplies problems or availability</li> <li>Health information technology issues such as display/interface issues (including display of information), system interoperability</li> <li>Availability of information</li> <li>Malfunction, incorrect selection, misconnection</li> <li>Labeling instructions, missing</li> <li>Alarms silenced, disabled, overridden</li> </ul> |
| Task/process<br>factors   | <ul> <li>Lack of process redundancies, interruptions, or lack of decision support</li> <li>Lack of error recovery</li> <li>Workflow inefficient or complex</li> </ul>   |
| Staff performance • Fatigue, inattention, distraction or workload |   |

# EXAMPLE

| factors  | <ul> <li>Staff knowledge deficit or competency</li> <li>Criminal or intentionally unsafe act</li> </ul>  |  |
|--|--|--|
| Team factors  • Speaking up, disruptive behavior, lack of shared mental model  • Lack of empowerment  • Failure to engage resident |  |  |
| Management/<br>supervisory/<br>workforce factors   | <ul> <li>Disruptive or intimidating behaviors</li> <li>Staff training</li> <li>Appropriate rules/policies/procedure or lack thereof</li> <li>Failure to provide appropriate staffing or correct a known problem</li> <li>Failure to provide necessary information</li> </ul> |  |
| Organizational culture/leadership  | <ul> <li>Organizational-level failure to correct a known problem and/or provide resource support including staffing</li> <li>Workplace climate/institutional culture</li> <li>Leadership commitment to resident safety</li> </ul>  |  |

Adapted from: Department of Defense, Patient Safety Program. PSR Contributing Factors List – Cognitive Aid, Version 2.0. May 2013.